

IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his)
capacity as ATTORNEY GENERAL)
OF THE STATE OF OKLAHOMA and)
OKLAHOMA SECRETARY OF THE)
ENVIRONMENT C. MILES TOLBERT,)
in his capacity as the)
TRUSTEE FOR NATURAL RESOURCES)
FOR THE STATE OF OKLAHOMA,)

Plaintiff,)

vs.)

4:05-CV-00329-TCK-SAJ

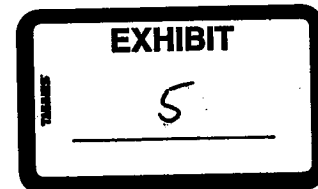
TYSON FOODS, INC., et al,)

Defendants.)

VOLUME II OF VIDEOTAPED

DEPOSITION OF EUGENE WELCH, PhD, produced as a
witness on behalf of the Defendants in the above
styled and numbered cause, taken on the 15th day of
August, 2008, in the City of Tulsa, County of Tulsa,
State of Oklahoma, before me, Lisa A. Steinmeyer, a
Certified Shorthand Reporter, duly certified under
and by virtue of the laws of the State of Oklahoma.

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<p>1 Q And what would that be?</p> <p>2 A Oh, I don't know. I have done additional</p> <p>3 work. I've looked at other literature. You've got</p> <p>4 the stuff here that I've worked at. Some of that is</p> <p>5 not in the report. So I can't say that I'm not 01:23PM</p> <p>6 going to stop doing this. We're still monitoring</p> <p>7 the reservoir. We looked at data from this year,</p> <p>8 and it looks pretty interesting, and it's going to</p> <p>9 be continuous sampling through the years, so we're</p> <p>10 going to look at that and, you know, as other data 01:23PM</p> <p>11 may come along, I'm not going to turn my back on it</p> <p>12 because I'm interested in the problem and trying to</p> <p>13 understand what's going on.</p> <p>14 Q You indicated that you've looked at data or</p> <p>15 information that's interesting. What do you mean by 01:23PM</p> <p>16 the word interesting?</p> <p>17 A Interesting, well, that's just what</p> <p>18 limnologists do, you know. They have fun looking at</p> <p>19 data. I can't, you know -- it's probably not</p> <p>20 understandable to most people. 01:24PM</p> <p>21 MR. BASSETT: Let's go ahead and break.</p> <p>22 VIDEOGRAPHER: We are now off the Record.</p> <p>23 The time is 1:24.</p> <p>24 (Following a short recess at 1:24 p.m.,</p> <p>25 proceedings continued on the Record at 1:36 p.m.) 01:36PM</p> <p style="text-align: center;">348</p>	<p>1 Q I'm asking, though, from 2002 up to the</p> <p>2 present, doesn't it appear that smallmouth bass have</p> <p>3 declined at Broken Bow Reservoir?</p> <p>4 A It may appear that way, but I wouldn't</p> <p>5 interpret the data that way. 01:38PM</p> <p>6 Q If Broken Bow is a healthy reservoir how can</p> <p>7 the apparent decline of smallmouth bass be</p> <p>8 explained?</p> <p>9 MR. PAGE: Object to the form.</p> <p>10 A You'd have to -- I'd have to rely on the 01:38PM</p> <p>11 average value over these years and not the value for</p> <p>12 any one year. I mean there's a lot of variability</p> <p>13 among years, and it can be for a lot of the things</p> <p>14 than just -- well, it could be a lot of factors.</p> <p>15 Q Will you agree that since 2002 it's declined? 01:38PM</p> <p>16 MR. PAGE: Object to the form.</p> <p>17 A The catch values in 2006 were lower than 2004</p> <p>18 and lower than 2002, but when I looked at these</p> <p>19 data, there's no way I was going to consider that</p> <p>20 because I said in the report that the data don't 01:39PM</p> <p>21 represent trends and this was the advice of Paul</p> <p>22 Balkenbush as well, that you don't represent trends.</p> <p>23 So I asked this question to begin with, is there a</p> <p>24 trend, and so I discounted it and only treated the</p> <p>25 two populations separately. 01:39PM</p> <p style="text-align: center;">350</p>
<p>1 VIDEOGRAPHER: We are now on the Record.</p> <p>2 The time is 1:36.</p> <p>3 Q Dr. Welch --</p> <p>4 A Yes, sir.</p> <p>5 Q -- would you open your report back to Figure 01:36PM</p> <p>6 31 for a moment. It's catch rates for smallmouth</p> <p>7 bass in Broken Bow and Tenkiller.</p> <p>8 A I'll look at mine, okay, because it's colored.</p> <p>9 Q Okay. That's fine.</p> <p>10 A Okay. 01:36PM</p> <p>11 Q Are you there?</p> <p>12 A Yep.</p> <p>13 Q Okay. Looking at the most recent years</p> <p>14 since -- well, from 2002 up to the present -- this</p> <p>15 is Exhibit 28, by the way. It's already in 01:37PM</p> <p>16 evidence, and your Figure 31. Does it appear to</p> <p>17 you, Dr. Welch, that the population of smallmouth</p> <p>18 bass appears to have declined in Broken Bow</p> <p>19 Reservoir since 2002?</p> <p>20 A No. 01:37PM</p> <p>21 Q Isn't the trending downward looking at this</p> <p>22 graph?</p> <p>23 A Yeah, but, you know, there's a low value here</p> <p>24 for 2006. You can go back and see low values over</p> <p>25 here. You can trail it off the other way. 01:37PM</p> <p style="text-align: center;">349</p>	<p>1 Q Did you have anything on fish populations at</p> <p>2 Broken Bow other than catch data?</p> <p>3 A No, not that I can recall.</p> <p>4 Q Let me get you to look for a moment at Figure</p> <p>5 37, which is Exhibit 29. This is on walleye, catch 01:39PM</p> <p>6 rates for walleye.</p> <p>7 A Yes.</p> <p>8 Q All right, and since 1999 up to the present,</p> <p>9 would you agree that the population of walleye</p> <p>10 appears to have declined at Broken Bow Reservoir or 01:40PM</p> <p>11 that it's trending down since then?</p> <p>12 MR. PAGE: Object to the form.</p> <p>13 A Again, same thing. You look at this</p> <p>14 distribution of walleye, and I would call that</p> <p>15 fairly consistent across that span of time, these 01:40PM</p> <p>16 high values and low values notwithstanding.</p> <p>17 Q Did you have any other data other than catch</p> <p>18 rates for walleye --</p> <p>19 A No.</p> <p>20 Q -- at Broken Bow? 01:40PM</p> <p>21 A No.</p> <p>22 Q I'm done with that one, Dr. Welch. Just got a</p> <p>23 few more questions. This has to do with what we</p> <p>24 were talking about right before we took the last</p> <p>25 break. What has led you, Dr. Welch, to believe that 01:40PM</p> <p style="text-align: center;">351</p>

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<p>1 you should continue to do analysis and continue to</p> <p>2 review additional data in this case?</p> <p>3 A Well, you know, I told you limnology is</p> <p>4 interesting, and you saw -- I mean if you look at</p> <p>5 the stuff that you copied, we've got some 2008 data 01:41PM</p> <p>6 in here so far, and I said if we continue sampling,</p> <p>7 what these data show is contrary -- I think it's</p> <p>8 going to work out contrary to the past three years</p> <p>9 when flows have been low and residence time high. I</p> <p>10 explained that that, you know, represented some of 01:41PM</p> <p>11 the reasoning for the low values in 2005 to 2007,</p> <p>12 but these values that we're seeing in 2008 so far</p> <p>13 are much higher than the ones in 2005 or 2007. So</p> <p>14 it looks like this concept that we presented in the</p> <p>15 regression lines of residence time versus total 01:42PM</p> <p>16 phosphorus concentration in the reservoir is being</p> <p>17 supported by the 2008 data. So it behooves us to</p> <p>18 continue to look at it.</p> <p>19 Q In doing this additional work, are you</p> <p>20 charging for your time? 01:42PM</p> <p>21 A Sure.</p> <p>22 Q Who authorized you to charge for that time?</p> <p>23 A I didn't ask for any authorization. I just</p> <p>24 assume it's there.</p> <p>25 Q You just assumed that? 01:42PM</p> <p>352</p>	<p>1 A I can't predict.</p> <p>2 Q Are you planning to attempt to alter or modify</p> <p>3 your report as you review this additional</p> <p>4 information?</p> <p>5 A It remains to be seen whether it's necessary 01:43PM</p> <p>6 or not.</p> <p>7 Q Are you planning on doing that if it's</p> <p>8 necessary?</p> <p>9 MR. PAGE: Object to form.</p> <p>10 A If it's necessary and after consultation with 01:43PM</p> <p>11 Dennis about our report together, then I could</p> <p>12 submit a supplemental. It's my understanding that</p> <p>13 supplementals can be submitted if it's approved.</p> <p>14 Q Who do you have that understanding from?</p> <p>15 A David Page. 01:44PM</p> <p>16 Q What are the -- what data have you reviewed</p> <p>17 since May 28th of this year?</p> <p>18 A Only literature and --</p> <p>19 Q What literature?</p> <p>20 A I read -- well, literature that I cited in the 01:44PM</p> <p>21 report. I went back and read it, and I looked in</p> <p>22 literature cited and looked up some of those other</p> <p>23 papers. You've got some of that right in here. I</p> <p>24 gave it to you.</p> <p>25 Q Anything that you have reviewed since May 28th 01:44PM</p> <p>354</p>
<p>1 A Yeah. I mean --</p> <p>2 Q Do you understand, Dr. Welch, that the court</p> <p>3 set a deadline of May 28th of this year for you to</p> <p>4 provide us with your opinions in this case?</p> <p>5 MR. PAGE: Object to the form. 01:42PM</p> <p>6 A Actually, no.</p> <p>7 Q Nobody has ever told you that?</p> <p>8 A Well, I knew there was a deadline. I didn't</p> <p>9 know it stopped us working. Nobody's ever told me</p> <p>10 to stop working. 01:42PM</p> <p>11 Q Are you operating under the assumption that</p> <p>12 you can modify your opinions from this point forward</p> <p>13 and offer new opinions or modified opinions?</p> <p>14 MR. PAGE: Object to the form.</p> <p>15 A Am I under the assumption? Can you be more 01:43PM</p> <p>16 specific?</p> <p>17 Q I think that's pretty specific. I can't.</p> <p>18 MR. PAGE: Same objection.</p> <p>19 A It depends on, you know, what kind of data</p> <p>20 and, you know, if I discuss it with the people who 01:43PM</p> <p>21 are running the show. I mean --</p> <p>22 Q And who would that be?</p> <p>23 A That would be David Page.</p> <p>24 Q When do you plan to be finished with your work</p> <p>25 in this case? 01:43PM</p> <p>353</p>	<p>1 other than that literature?</p> <p>2 A No, I don't think so. I think I got it all</p> <p>3 there but I can't be sure.</p> <p>4 Q Have you reviewed any data results since May</p> <p>5 28th of this year? 01:45PM</p> <p>6 A Well, I read reports.</p> <p>7 Q From who?</p> <p>8 A Engel, Fisher, Stevenson. I'm in the process</p> <p>9 of reading Stevenson's. So that's an ongoing.</p> <p>10 MR. PAGE: Do you mean sampling results 01:45PM</p> <p>11 when you said data results?</p> <p>12 MR. BASSETT: Yeah.</p> <p>13 Q Have you reviewed any 2008 sampling reports?</p> <p>14 A Yeah. What's in here, I just saw it two days</p> <p>15 ago. 01:45PM</p> <p>16 Q When you say it's in here, are you referring</p> <p>17 to the files you brought with you to the deposition?</p> <p>18 A The ones you copied.</p> <p>19 Q Okay. So we have copies of those now?</p> <p>20 A You do. 01:45PM</p> <p>21 Q Copies of that data?</p> <p>22 A Yes.</p> <p>23 Q That 2008 data?</p> <p>24 A Yes.</p> <p>25 Q Have you produced that data that you just 01:45PM</p> <p>355</p>

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